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NOTICE OF ALLOWANCE AND FEE(S) DUE

57726

7590

07/02/2009

MILLER, MATTHIAS & HULL
ONE NORTH FRANKLIN STREET
SUITE 2350
CHICAGO, IL 60606

EXAMINER

WITZENBURG, BRUCE A

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 07/02/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,655	07/17/2007	Francois Lebrat	28944/50051	2366

TITLE OF INVENTION: METHOD FOR SEARCHING CONTENT PARTICULARLY FOR EXTRACTS COMMON TO TWO COMPUTER FILES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/02/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

57726 7590 07/02/2009
MILLER, MATTHIAS & HULL
ONE NORTH FRANKLIN STREET
SUITE 2350
CHICAGO, IL 60606

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,655 07/17/2007 Francois Lebrat 28944/50051 2366

TITLE OF INVENTION: METHOD FOR SEARCHING CONTENT PARTICULARLY FOR EXTRACTS COMMON TO TWO COMPUTER FILES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/02/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
WITZENBURG, BRUCE A	2166	707-003000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
 Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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MILLER, MATTHIAS & HULL ONE NORTH FRANKLIN STREET SUITE 2350 CHICAGO, IL 60606			WITZENBURG, BRUCE A	
			ART UNIT	PAPER NUMBER
			2166	
DATE MAILED: 07/02/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 288 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 288 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/599,655

Applicant(s)

LEBRAT, FRANCOIS

Examiner

BRUCE A. WITZENBURG

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Remarks filed 10/04/2006.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 12/11/2006
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Etienne P LeRoux/
Primary Examiner, Art Unit 2161

/Bruce A Witzenburg/
Examiner, Art Unit 2166

DETAILED ACTION

1. Claims 1-30 are pending in the instant application.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Changes have been made in accordance with agreement reached with applicant over the phone June 10th 2009.

3. Claims 1, 9, 14, 26, and 27 have been amended as follows:

1. (currently amended) A method implemented by computer means of searching content, for at least one extract common to a first file and to a second file, in the form of binary data, being searched for, wherein the method comprises:
a prior preparation of the first file at least, comprising the following steps:
a) segmenting the first file into a succession of data packets, of chosen size, and identifying addresses of packets in said file,

b) associating with the address of each packet a digital signature defining a fuzzy logic state from among at least three states: "true", "false" and "undetermined", said signature resulting from a combinatorial calculation on data emanating from said file, and the search for common extract, itself, comprising the following steps:

c) comparing the fuzzy logic states associated with each packet address of the first file, with fuzzy logic states determined on the basis of data emanating from the second file,

d) eliminating from said search for common extract, pairs of respective addresses of the first and second files whose respective logic states are "true" and "false" or "false" and "true", and preserving the other pairs of addresses identifying data packets liable to comprise said common extract.

9. (currently amended) The method as claimed in claim 3, ~~taken in combination with claim 2~~, wherein:

the "true" state is assigned to the address of a packet if, for this packet, all the filtered samples have a value greater than a chosen reference value,

the "false" state is assigned to the address of a packet if, for this packet, all the filtered samples have a value less than a chosen reference value, and

the "undetermined" state is assigned to the address of a packet if, for this packet, the filtered samples have, for certain of them, a value less than said reference value, and, for other filtered samples, a value greater than said reference value.

14. The method as claimed in claim 13, ~~taken in combination with claim 12~~, wherein the fuzzy states determined for a least number of coefficients K are coded on least significant bits and the fuzzy states determined for a larger number of coefficients K are coded on subsequent bits, up to a chosen total number of bits.

26. (currently amended) A computer program product, ~~intended to be stored in a memory of a central unit of a computer or on a removable medium intended to cooperate with a reader of said central unit~~, the program comprising instructions for conducting steps for searching at least one extract common to a first file and to a second file, in the form of binary data, said steps comprising:

a prior preparation of the first file at least, including the following steps:

- a) segmenting the first file into a succession of data packets, of chosen size, and identifying addresses of packets in said file,\
- b) associating with the address of each packet a digital signature defining a fuzzy logic state from among at least three states: "true", "false" and "undetermined", said signature resulting from a combinatorial calculation on data emanating from said file, and the search for common extract, itself, including the following steps:
- c) comparing the fuzzy logic states associated with each packet address of the first file, with fuzzy logic states determined on the basis of data emanating from the second file,
- d) eliminating from said search for common extract, pairs of respective addresses of the first and second files whose respective logic states are "true" and "false" or "false" and

"true", and preserving the other pairs of addresses identifying data packets liable to comprise said common extract.

27. A data structure ~~intended to be stored on a computer-readable storage medium~~ used for a search of at least one extract common to a first and a second file, the data structure being representative of the first file, the data structure being obtained by the implementation of the following steps:

- a) segmenting the first file into a succession of data packets of chosen size, and identifying addresses of packets in said file.
- b) associating with the address of each packet a digital signature defining a fuzzy logic state from among at least three states: "true", "false" and "undetermined", said signature resulting from a combinatorial calculation on data emanating from said file, the data structure thus comprising a succession of addresses identifying addresses of the first file, a fuzzy logic state from among the states: "true", "false" and "undetermined", being assigned to each of said addresses of the data structure.

c) comparing the fuzzy logic states associated with each packet address of the first file, with fuzzy logic states determined on the basis of data emanating from the second file,

d) eliminating from said search for common extract, pairs of respective addresses of the first and second files whose respective logic states are "true" and "false" or "false" and "true", and preserving the other pairs of addresses identifying data packets liable to comprise said common extract.

Allowable Subject Matter

4. Claims 1-30 are allowed.

The following is an examiner's statement of reasons for allowance: The closest prior art of record is Kirovski et al. (US 6,738,744) hereafter "Kirovski," Pai et al. (US 5,935,247) hereafter "Pai," Xu et al. (US 6,674,861) hereafter "Xu," and Braudaway et al. (US 5,825,892) hereafter "Braudaway." Kirovski deals with searching for a known watermark within a file. While Kirovski does contain an implementation that has segmented files and searching for data which may give an erroneous result thus potentially making obvious the implementation of "fuzzy logic," the operation is markedly different as it operates with a known watermark and pseudorandom noise generation method. Instead, the implementation of the instant application is quite different. It works with two files to determine if they share an extract instead of with a file and a pseudorandom algorithm to determine if the pseudorandom algorithm was used on the file. In addition, while Kirovski has files divided into blocks (i.e. audio "frames") it does not show the system splitting the music into frames or using addresses of the frames to carry out its implementation. The remaining prior art deals primarily with the background of watermarking or genetic code instead of the detection thereof which the instant application aims to do.

The dependent claims which are definite and enable by the specification and being further limiting to the independent claims are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRUCE A. WITZENBURG whose telephone number is (571)270-1908. The examiner can normally be reached on M-F 9:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruce A Witzenburg/

Examiner, Art Unit 2166

/Etienne P LeRoux/

Primary Examiner, Art Unit 2161